WHAT IS CLAIMED IS:

1. A positive active material for rechargeable lithium batteries, the positive active material comprising:

an active material component processed from a manganese-based compound, the manganese-based compound being selected from the group consisting of Li_xMnO_2, Li_xMnF_2, Li_xMnS_2, $Li_xMnO_{2-z}F_z$, $Li_xMnO_{2-z}S_z$, $Li_xMn_{1-y}M_yO_2$, $Li_xMn_{1-y}M_yF_2$, $Li_xMn_{1-y}M_yS_2$, $Li_xMn_{1-y}M_yO_{2-z}F_z$, $Li_xMn_{1-y}M_yO_{2-z}S_z$, $Li_xMn_2O_4$, $Li_xMn_2F_4$, $Li_xMn_2S_4$, $Li_xMn_2O_{4-z}F_z$, $Li_xMn_2O_{4-z}S_z$, $Li_xMn_{2-y}M_yO_4$, $Li_xMn_{2-y}M_yF_4$, $Li_xMn_{2-y}M_yS_4$, $Li_xMn_{2-y}M_yO_{4-z}F_z$, and $Li_xMn_{2-y}M_yO_{4-z}S_z$ where $0<x\leq1.5$, $0.05\leq y\leq0.3$, $z\leq1.0$ and M is selected from the group consisting of Al, Co, Cr, Mg, Fe and La; and

a metallic oxide coated on the active material component.

2. The positive active material of claim 1 wherein the metallic oxide has a metal component selected from the group consisting of Si, Mg, Ti and Al.

3. The positive active material of claim 1 wherein the metallic oxide has a thickness ranged from 1 to 100nm.

4. The positive active material of claim 1 wherein the metallic oxide has a 0.1 to 10 weight percent of metal component.

5. A method of preparing a positive active material for rechargeable lithium batteries, the method comprising the steps of:

obtaining a powder from a source material, the source material being selected from the group consisting of Li_xMnO_2, Li_xMnF_2, Li_xMnS_2, $Li_xMnO_{2-z}F_z$, $Li_xMnO_{2-z}S_z$, $Li_xMn_{1-y}M_yO_2$, $Li_xMn_{1-y}M_yF_2$, $Li_xMn_{1-y}M_yS_2$, $Li_xMn_{1-y}M_yO_{2-z}F_z$, Li_xMn_{1-}

$_yM_yO_{2-z}S_z$, $Li_xMn_2O_4$, $Li_xMn_2F_4$, $Li_xMn_2S_4$, $Li_xMn_2O_{4-z}F_z$, $Li_xMn_2O_{4-z}S_z$, $Li_xMn_{2-y}M_yO_4$, $Li_xMn_{2-y}M_yF_4$, $Li_xMn_{2-y}M_yS_4$, $Li_xMn_{2-y}M_yO_{4-z}F_z$, and $Li_xMn_{2-y}M_yO_{4-z}S_z$ where $0<x\leq1.5$, $0.05\leq y\leq0.3$, $z\leq1.0$ and M is selected from the group consisting of Al, Co, Cr, Mg, Fe and La;

coating the powder with a metallic alkoxide solution to make an alkoxide-coated powder; and

heat-treating the metallic alkoxide-coated powder such that the metallic alkoxide-coated powder is changed into a metallic oxide-coated powder.

6. The method of claim 5 wherein the metallic alkoxide solution is selected from the group consisting of Si-alkoxide, Mg-alkokxide, Ti-alkoxide and Al-alkoxide.

7. The method of claim 5 wherein the metallic alkoxide solution contains a 1 to 50 weight percent of metal component.

8. The method of claim 5 wherein the heat-treating step is performed at temperatures ranged from 200 to 1000°C for 1 to 20 hours.